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Chuck Reiss: Building Green

By David Dobbs

I met builder Chuck Reiss in the Hinesburg town hall, where he had invited me to a meeting of his builders group. When I got there, mid-meeting, 14 contractors and other building professionals were grilling a couple of Vermont legislators over a proposed law that would place limitations on how long a contractor or architect could be held liable for flaws in his or her work.

I've known dozens of ethical builders, yet I was still surprised when I realized the biggest concern of the contractors at the meeting was that the proposed statute might not hold builders and architects to high enough standard of responsibility: Was 11 years a long enough window of opportunity for clients to sue builders for defects?

Clearly this wasn't just any builders' association. It was, in fact, the Builders for Social Responsibility, a progressive group of builders, subcontractors, architects, and other building professionals that Chuck Reiss and a few colleagues had formed in 1990. The founders first met when they answered a call for volunteers to build a recycling shed at the Hinesburg dump; while building the shed, they found they had certain progressive building notions in common: That buildings should be energy efficient; that their construction should minimize loads on the earth's resource base; that they should be healthy places in which to live; that they should fit in well with the needs of the larger world and the community in which they are built.

A Healthy Invention

"We had an idea on what good building should be," as Reiss puts it. "So we decided, we should design a house - a plan, material specifications, the whole thing - that shows people that it's possible to build a house that is both affordable and environmentally low-impact."

Chuck and a few others started meeting regularly to design this house; by 1992, they had the design and specs completed. As with most houses, it would be a while before that one actually got built-the group could not afford to build one on speculation, so they had to wait for an interested client. In the meantime, BSR, as the group came to call themselves, began meeting regularly to exchange ideas about other issues.

In the years since they have explored virtually all the concerns shared by progressive, environmentally-oriented builders across the country: energy efficiency; indoor air quality; affordable housing; the effects of development on communities; the impact on natural resources (forests, water supplies, the ozone layer) of making and using various building materials; alternative energy sources; recycling; and the total "embodied energy" of various materials - that is, the energy required not just to create or use a given building material or component; rather, the energy to create, transport, install, use, and ultimately dispose or recycle it. The group also held a major conference for both builders and consumers on "The Healthy House."

Chuck has worked steadily to keep the BSR an active organization, and the group, which has about 40 to 50 members at a given time, has done much to educate its members and the public about these issues. BSR is very much a cooperative organization. But as longtime member and, building writer Clayton DeKorne puts it, "Chuck has been the guy that really made it happen."

Like many contractors, Reiss eased into the building business slowly. He started banging nails summers and, part-time while a student, first in Minnesota and then at University of Vermont, where he came in the early 1980s to do graduate work in environmental biology. While working on his master's thesis ("It was one of those theses that took a while to get written," says Reiss), he found himself banging more and more nails as Vermont's building economy grew.

During most of those years, he says, "I saw building mainly as a way to pay the bills. It wasn't until I finished my degree that I started looking at it as a serious occupation. Once I took it more seriously, I started to think about how to incorporate my environmental interests into building. "

The late 1980s and early 1990s was a time when many forces-dwindling timber supplies, the emergence of the indoor air quality issue, Earth Day 1990, the recognition of economic and environmental limits that came with the end of the 1980s boom-were inspiring green building projects and groups across the country. The BSR formed a significant part of this surge, linking environmentally concerned building professionals within Vermont to like-minded colleagues nationwide.



Consumers have lagged somewhat behind this curve. Reiss feels lucky to have found clients who are educated about these issues, and who will pay him to build environmentally sensitive houses. He has built or remodeled several in the Hinesburg area, and this year found a client who wanted to build a house based on the BSR Project House design.

Economics Favor Environment

The 1800-square-foot Cape will feature thick cellulose insulation in its walls, a tight, insulated basement, insulated windows, minimal use of products containing formaldehyde or other chemicals that might offgas noxious fumes, low-flow toilets and plumbing fixtures, fluorescent lighting, and a passive solar design that will allow the house to be heated by a single Vermont Castings wood stove. Contrary to many people's expectations, these measures should not seriously inflate the house's cost: Chuck expects the house will cost about \$110,000 to build, or about \$61 a square foot-cheaper than many conventionally built homes of similar size and quality.

Not all clients, of course, fully appreciate such measures. "People can relate to energy efficiency, because it costs money month-to-month, and indoor air quality, because it affects your health," says Reiss. " And most people understand about CFCs and the ozone layer. But their eyes glaze over at the more obtuse stuff, like embodied energy, and you have to sell them a decision that's cost-conscious."

This is changing, however, and largely because of groups like BSR. In only a few short years, these grassroots groups have pushed "green building" concerns from a grassroots movement into the larger building industry. The National Association of Home Builders, for instance-a group not known for progressive stances- has completed its model green home, and green building design and marketing seminars are standard fare at mainstream builder conferences. "It takes time," says Reiss. "But I really think that people are realizing that buildings can do a lot to deal with our environmental problems. "